

WHAT IS CLAIMED IS:

1. A variable valve mechanism comprising:

a first intervening member that rotates a small angle rotation about an axis of a support shaft by being pressed by a rotating cam;

5 a second intervening member that lifts a valve by making a small angle rotation about an axis of said support shaft together with said first intervening member thus pressing a cam corresponding part of a rocker arm;

a control shaft provided concentrically with said support shaft;

a slider that moves with said control shaft;

10 a slanted part formed diagonally relative to said slider's movement direction, contacting with said slider; and

a relative rotation angle control device, wherein

said relative rotation angle control device varies the relative rotation angle of said first intervening member and said second intervening member by pressing said slanted part in a direction
15 substantially perpendicular to said slider's movement direction by moving said slider together with said control shaft, thus varying the valve's lift and operating angle continuously.

2. The variable valve mechanism of claim 1 wherein said slider is provided on one of said first intervening member and second intervening member; and

20 said slanted part is provided on the other one of said first intervening member and second intervening member.

3. The variable valve mechanism of claim 1 wherein said slider and said slanted part are provided on either one of said first intervening member and second intervening member; and

25 a guide part for guiding said slider's motion is provided on the other one of said first intervening

member and second intervening member.

4. The variable valve mechanism of claim 1 wherein said slider and said slanted part comprising a slit are provided on said first intervening member; and

5 a guide part for guiding said slider's motion is provided on said second intervening member.

5. The variable valve mechanism of claim 1 wherein said slider and a guide for guiding said slider's motion are provided on said first intervening member; and

said slanted part comprising a slit is provided on said second intervening member.

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